

Momentive Performance Materials Inc.

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February 27, 2018

Mr. Kenan Cetin
Project Manager, RCRA Corrective Action
Division of Water and Waste Management (DWWM)
West Virginia Department of Environmental Protection (WVDEP)
131A Peninsula Street
Wheeling, WV 26003

Re:

2017 Annual Corrective Action Report

MPM Silicones, LLC - Sistersville Plant

EPA ID No.: WVD004325353

Dear Mr. Cetin:

This letter report is MPM Silicones, LLC's annual corrective action report for 2017. It is being submitted to you as specified in Module X, Section H-2 of our hazardous waste management renewal permit, which became effective on May 30, 2008.

1. Introduction:

The Permit requires corrective actions at the Facility for four specific areas, summarized as follows:

Permit Reference	Corrective Action Area	Corrective Action Requirements						
G-3b	North Inactive Site	Earthen cover inspection & maintenance Annual groundwater monitoring						
G-3c	South Inactive Site	Ground cover inspection Quarterly groundwater monitoring						
G-3d	Waste Water Treatment System	Equipment inspection Surface impoundment leak rate monitoring						
G-3e	No. 3 Sludge Pond and BTEX Area	Groundwater recovery well operation Quarterly groundwater monitoring						

2. Work Completed During the year:

G-3b North Inactive Site – Work completed during the year included inspection, maintenance and groundwater monitoring activities. The earthen cover, diversion ditches and the banks of Sugar Camp Run were inspected in March, June, July, and October. Annual groundwater sampling was completed in June. The site was moved in July and October.

G-3c South Inactive Site – Work completed during the year included inspection, maintenance and groundwater monitoring activities. Quarterly ground cover inspections were performed in conjunction with quarterly groundwater sampling conducted in March, June, September and November. Mowing and cutting of brush around groundwater monitoring wells was completed in August and October.

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<u>G-3d Waste Water Treatment System</u> – Work completed during the year included equipment inspection, removal of sludge from the surface impoundments, and surface impoundment leak rate monitoring and reporting.

The West primary clarifier was shut down in March for repairs to the bridge. The East primary clarifier was shut down in March and April for maintenance and repair. Both were inspected at these times.

The East UNOX reactor was shut down and inspected in October.

Sludge was removed from the Panic Pond, dewatered, and a total of 241,500 pounds disposed of in the on-site hazardous waste landfill in May during annual cleaning of the surface impoundments. The EQ basin was also inspected and it was determined that no sludge removal was necessary due to lack of accumulation.

The terminal manhole and neutralization pit were inspected during the October plant-wide electrical shutdown. Approximately 1,100 feet of main process sewer lines were video inspected. In addition, approximately 180 feet of these lines was lined using Layne Inliner® cured-in-place-pipe (CIPP) lining technology during the shutdown.

The permit requires monitoring of surface impoundment leakage rates, but only requires sampling and reporting if monthly average leakage rates exceed 750 gallons per day. Daily monitoring results were reviewed weekly and monthly average leakage rates for both impoundments were less than 197 gallons per day throughout 2017.

<u>G-3e No.3 Sludge Pond and BTEX Area</u> – Work completed during the year included continued operation and maintenance of groundwater recovery well #4315 and groundwater monitoring activities.

Groundwater recovery well #4315 continued to operate throughout the period. However, flow dropped during the first week of September. The groundwater pump was pulled and replaced on September 8. We believe that scale has built up in the discharge line restricting the flow. The line was chemically cleaned on September 18 and flow restored to normal levels.

Quarterly groundwater sampling was completed in March, June, September and November.

The groundwater flow direction was evaluated to verify that contaminants from the North Inactive Site and the No. 3 Sludge Pond and BTEX Area are continuing to be captured by the recovery well.

3. Groundwater sampling data:

<u>G-3b North Inactive Site</u> – Groundwater results for monitoring wells NF-1 through NF-9 for the analytes specified in Condition X-G-3(b)(iv)(1) of the permit are attached.

1,1-dichloroethane was detected only in monitoring well NF-7 and NF-8 at levels ranging from 2.07 to 8.23 ug/L. USEPA has not established a Maximum Contaminate Level (MCL) for 1,1-dichloroethane.

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Benzene was not detected.

Chlorobenzene was detected in monitoring wells NF-2, NF-7 and NF-8 at levels ranging from 1.86 to 42.5 ug/L. All results were below the 100 ug/L MCL for chlorobenzene.

Results for all other specified analytes in all wells were below detection limits.

<u>G-3c South Inactive Site</u> – Groundwater results for monitoring wells 5701, 5702, 5703, 5704, 5705 and 2701-R for the analytes specified in Condition X-G-3(c)(ii)(1) of the permit are attached.

Benzene was detected only in monitoring well 5704 in the third, and fourth quarters at levels ranging from 2.72 to 4.8 ug/L. All results were below the 5 ug/L MCL for benzene.

Dichloroethylene (cis-1,2) was detected only in monitoring well 5704 in the second, third, and fourth quarters at levels ranging from 1.9 to 4.87 ug/l. All results were below the 70 ug/L MCL for Dichloroethylene (cis-1,2).

Results for all other specified analytes in all wells were below detection limits.

<u>G-3e No.3 Sludge Pond and BTEX Area</u> – Groundwater monitoring results for monitoring wells 20 and 3203 for the analytes specified in Condition X-G-3(e)(vii) of the permit are attached.

Dichloroethylene (cis-1,2) was detected in monitoring well 20 in the second quarter at levels ranging from 1.66 to 4.68 ug/L. All results were below the 70 ug/L MCL for dichloroethylene (cis-1,2).

4. Changes made during the year:

G-3b, G-3c, G-3d and G-3e - Jeff McKinney is the new EHS Leader.

5. Summary of problems encountered and actions taken:

G-3b, G-3c, G-3d, G3e. - No problems were encountered during 2017.

6. Projected work for next year:

<u>G-3b North Inactive Site</u> – Inspection and maintenance activities (annual mowing, brush and weed control, cleaning drainage ditches) will be conducted according to the schedule in condition X-G-3(b)(ii) of the permit. Annual groundwater monitoring will be conducted.

G-3c South Inactive Site - Inspection of the ground cover and groundwater monitoring will be conducted quarterly.

<u>G-3d Waste Water Treatment System</u> – We plan to shut down and inspect the East primary clarifier in the spring and the West UNOX reactor in the fall and will continue to monitor leakage rates of the surface impoundments.

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<u>G-3e No.3 Sludge Pond and BTEX Area</u> – We will continue to operate groundwater recovery well #4315.

The groundwater flow direction will be evaluated to verify that contaminants from the North Inactive Site, No. 3 Sludge Pond and BTEX Area are continuing to be captured by the recovery well. Groundwater monitoring will be conducted quarterly.

As required by Condition I-I of our permit, the following certification is being made:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions concerning this report, please contact Vic Cwynar at (304) 652-8612 or by email at victor.cwynarjr@momentive.com.

Sincerely,

MPM SILICONES, LLC

Chad McKnight

Sr. Director of Operations - Sistersville

Attachments

CC:

Jeff McKinney - MPM Steve Freed - MPM Sanat Bhavsar - MPM Ramin Ansari- Chemtura Talal Fathallah - WVDEP Sudhir Patel - WVDEP John Hopkins - USEPA State Correspondence File

MPM Silicones LLC - Sistersville Site 2017 RCRA Corrective Action Groundwater Monitoring - North Inactive Site

<0.84	<1.96	<1.13	<0.885	<0.65	<1.92	2	NF-9
<0.84	<1.96	<1.13	42.5	<0.65	8.23	2	NF-8
<0.84	<1.96	<1.13	1.86	<0.65	2.07	2	NF-7
<0.8	<1.96	<1.13	<0.885	<0.65	<1.92	2	NF-6
<0.84	<1.96	<1.13	<0.885	<0.65	<1.92	2	NF-5A
<0.84	<1.96	<1.13	<0.885	<0.65	<1.92	2	NF-4
<0.84	<1.96	<1.13	<0.885	<0.65	<1.92	2	NF-3A
<0.84	<1.96	<1.13	6.35	<0.65	<1.92	2	NF-2
<0.84	<1.96	<1,13	<0.885	<0,65	<1.92	2	NF-1
l/gu	ug/l	ug/l	l/Bn	ug/l	ug/l	Quarter	Well
Toluene	Dichloroethylene (-trans-1,2)	Dichloroethylene (cis-1,2)	Chlorobenzene	Benzene	1,1-Dichloroethane		

MPM Silicones LLC - Sistersville Site 2017 RCRA Corrective Action Groundwater Monitoring - South Inactive Site

			5705				5704				5703				5702				5701				2701-R	Well	
4	3	2	1	4	ω	2	4	4	ω	2	Þ	4	8	2		4	Ü	2	Д	4	ω	2	1	Quarter	
<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	4.7>	<1.77	<1.77	<1.77	4.77	<1.77	4.77	<1.77	<1.77	<1.77	<1.77	ug/l	1,1,1- Trichloroethane
<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	<1.92	ug/l	1,1- Dichloroethane
<2.14	<2.14	<2.14	<2,14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.114	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	<2.14	C2.14	ug/l	1,2- Dichloroethane
<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21.2	<21,2	ug/i	Acrylonitrile
<0.65	<0.65	<0.65	<0.65	2.72	4.8	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	⇒40.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	ug/I	Benzene
<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	ng/i	Chloro- benzene
<1.13	<4.13	<1.13	<1.13	4.87	2.84	2.72	1.9	<1.13	4.13	<1.13	4.13	<1.13	△.13	<1,13	<1.13	41.13	<1.13	<1.13	4.13	<1.13	<1,13	<1.13	<1.13	ug/i	Dichloroethylene (cis-1,2)
<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	21.96 E	<1.96	<4.96	<1.96	<1.96	<1.96	96.T>	<1.96	<1.96	<1.96	96.1>	<1,96	<1.96	<1.96	<1.96	ug/l	Dichloroethylene (-trans-1,2)
<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	ug/I	Ethyl- benzene
<0.93	<0.93	<0.93	<0.93	<0.93	A 9.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0 <u>.93</u>	<0.93	ug/l	m,p- Xylene
<1.44	<1.44	<1.44	444	<1.44	<1.44	2.44	44.12	44.4	41.4	1,44	<1.44	4.4	4.12	44.4	41,44	<1.44	2144	△1.44	<1,44	<1.44	<1.44	Δ.44	44	ug/l	o- Xylene
<1.64	<1.64	<1.64	<1.64	∆1.64	<1.64	41.64	<1.64	41.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	△1.64	<1.64	<1.64	41.64	<1.64	l/gu	Methyl chloride
<0.84	<0.84	<0,84	<0.84	<0.84	∆ 0.84	<0.84	<0.84	<0.84	<0.84	<0.84	6.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	♦ 0.84	<0.84	<0.84	ug/l	Toluene

MPM Silicones LLC - Sistersville Site 2017 RCRA Corrective Action Groundwater Monitoring - No. 3 Sludge Pond & BTEX Area

The state of the s			3203							20	WeⅡ	UMAAAAAAAA WAXAA WAXAA
4	3	2	ن سر	4	4	3	2	2	₽	1	Quarter	
<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	ug/l	Benzene
<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	<0.885	ug/l	Chlorobenzene
⊴.13	<1.13	3.73	<1.13	<1.13	<1.13	4.39	4.68	4.55	1.67	1.66	ug/l	Dichloroethylene (cis-1,2)
<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	ug/l	Dichloroethylene (-trans-1,2)